

Title (en)
ATOMICALLY POLARIZABLE ELECTORRHEOLOGICAL MATERIALS.

Title (de)
ATOMISCH POLARISIERBARE ELEKTORRHEOLOGISCHE MATERIALIEN.

Title (fr)
MATERIAUX ELECTORRHEOLOGIQUES A ATOMES POLARISABLES.

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EP 0626003 A1 19941130 (EN)

Application
EP 93904596 A 19930119

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Abstract (en)
[origin: WO9315169A1] An electrorheological material comprising a carrier fluid and an atomically polarizable particle component. The atomically polarizable particle component has a crystalline lattice structure which allows atoms to shift position with respect to each other in response to the application of an electric field. The electrorheological materials are subjected to an alternating current electric field at a frequency of at least 500 Hz. The materials exhibit substantial electrorheological activity over a broad temperature range.

Abstract (fr)
Un matériau électrorhéologique comprend un fluide vecteur et une composante constituée de particules à atomes polarisables et dotée d'une structure en réseau cristallin qui permet à ces atomes de modifier leur position relative en réaction à l'application d'un champ électrique. On soumet ces matériaux électrorhéologiques au champ électrique créé par un courant alternatif d'une fréquence d'au moins 500 Hz. Ces matériaux présentent une forte activité électrorhéologique sur une large fourchette de températures.

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